# CENTRAL WATERFRONT STAKEHOLDERS GROUP

MEETING SUMMARY Meeting #2 March 3, 2011

#### **MEETING INFORMATION**

Meeting #2, March 3, 2011 5:15 – 7:15 p.m. Seattle Central Library, Washington Mutual Foundation Meeting Room

## **ATTENDANCE**

## Stakeholders

- Warren Aakervik
- Brett Allen
- Geoff Anderson
- Chuck Ayers
- Bob Davidson
- Bob Donegan
- Kojo Fordjour (for Nicole McIntosh)
- Ann Guise (for Richard Breslin)
- Craig Hanway
- Brian Kenny
- Charles Knutson
- Vince O'Halloran
- John Odland
- Katherine Olsen
- Vlad Oustimovitch
- Geri Poor
- Lisa Quinn (for David Ramsay)
- Theresa Schneider
- Dale Sperling
- Brian Steinburg
- Tom Tanner

### Staff

- Bob Powers, Seattle Department of Transportation (SDOT)
- Bob Chandler, SDOT
- Stephanie Brown, SDOT
- Steve Pearce, SDOT
- Marshall Foster, DPD
- Paul Elliott, SDOT
- Hannah McIntosh, SDOT
- Linda Smith, U.S. Army Corps of Engineers (Corps)
- Miriam Gilmer, Corps
- Mark Williams, TetraTech
- Erin Taylor, Envirolssues
- Ridge Robinson, TetraTech
- Bob Fernandes, BergerABAM
- Drew Gangnes, MKA
- Paul Schlenger, Anchor
- Jim Brennan, JA Brennan

Approximately seven members of the public were in attendance.

## **WELCOME AND INTRODUCTIONS**

Bob Powers, SDOT Deputy Director, welcomed the meeting attendees and reviewed the meeting objectives:

- To ensure common understanding of Elliott Bay Seawall Project purpose and goals,
- To ensure stakeholder understanding of Elliott Bay Seawall Project habitat conditions and restoration opportunities, and
- To introduce Elliott Bay Seawall Project alternatives development process and schedule.

Bob initiated a round of introductions of stakeholders and staff.

Scattle.org Elliott Bay Seawall

#### HOUSEKEEPING

Erin Taylor noted that a summary of the first Central Waterfront Stakeholder Group meeting is included in the meeting materials, and asked if anyone had questions or clarifications to the document.

**Comment:** The last question on page three of the meeting minutes incorrectly characterizes the plans for the future roadway. Please make a distinction between plans during and after construction.

✓ Action: The team will distinguish between plans during and after construction in future meeting minutes.

**Question:** Will the stakeholders continue to receive more information at meetings through April, at which point they will provide input into locally preferred alternatives? **Response:** Yes, this meeting and the March 22 meeting are intended to give the stakeholders enough information to provide input into the alternatives that will be carried into the environmental documents.

Bob Powers noted that the project teams will distribute the last meetings' minutes more quickly moving forward.

Erin Taylor reintroduced the ground rules established at the first Central Waterfront Stakeholders Group meeting and noted that they will be posted at all future meetings.

#### WATERFRONT SEATTLE UPDATE

Steve Pearce, Project Manager for Waterfront Seattle, summarized recent Waterfront Seattle activities. The project's kick-off event was held on February 17, 2011, at the Seattle Aquarium. Over 1,000 people attended. Steve thanked Bob Davidson, CEO of the Seattle Aquarium, for use of the facility. Mayor Mike McGinn provided introductory remarks and welcomed James Corner, james corner field operations, to present the design team's initial site analysis. Steve noted that the <a href="www.waterfrontseattle.org">wwww.waterfrontseattle.org</a> website includes a link to the Seattle Channel's video of the presentation and an online survey. Public input was submitted at the event via graffiti boards, sticker exercises, video testimonials, and hand-written surveys. All input will be synthesized and used to guide the design work. Media coverage of the opening event was extensive, which helped to engage the broader community with the project.

In addition, an event the following day (February 18) signified progress on the waterfront: the First Avenue ramp to the Alaskan Way Viaduct was demolished as part of the Washington State Department of Transportation (WSDOT)'s Alaskan Way Viaduct and Seawall Replacement Program, indicating the first steps to opening up the waterfront. The next steps for Waterfront Seattle include continued coordination with the Elliott Bay Seawall Project over the next year, the completion of a Framework Plan, and hosting at least two more public events.

**Question:** Will the team accept local input for ideas for summer public events? That is, could ideas for partnerships be suggested?

**Response:** Yes, the Waterfront Seattle team would welcome ideas and will ensure that stakeholders know the timeline for planning events.

#### **ELLIOTT BAY SEAWALL PROJECT: COMMON UNDERSTANDING**

Stephanie Brown, Project Manager for the Elliott Bay Seawall Project, re-introduced the Elliott Bay Seawall Project to ensure that all stakeholders have a common understanding of the project's purpose. The seawall project area stretches from South Washington to Broad Streets. In coordination with the U.S. Army Corps of Engineers (Corps), the Elliott Bay Seawall Project began its environmental scoping period in June 2010. Prior to that, the seawall was managed by WSDOT, as part of the state's Alaskan Way Viaduct and Seawall Replacement (AWV) Program. The seawall serves several functions along the waterfront, all of which fall under the umbrella of protection: the seawall protects public safety, utilities, transportation uses, and residential and commercial interests, thereby supporting Seattle's front porch. The Elliott Bay Seawall Project will protect the waterfront by addressing seismic risk and exploring opportunities to improve waterfront habitat and recreation.

Eight project goals were established in 2010 with the Seawall Stakeholder Subgroup:

- Address critical structural public safety needs at the shoreline.
- Respect cultural, archeological, and historic resources.
- Consider long-term vision for the Central Waterfront.
- Provide enhanced habitat and environmental quality.
- Provide enhanced public gathering and recreational opportunities.
- Support the economic vitality of the waterfront.
- Minimize cumulative construction impacts.
- Support fiscal responsibility.

**Comment:** The project goals do not reflect the same ideas as the project needs. A stronger articulation of the connection between goals and needs should be present in public documents.

**Response:** The project goals were meant to augment the need for the project described in partnership with the Army Corps of Engineers. However, the project team will attempt to make the connection more clear.

✓ Action: Clarify the connection between project needs and goals in future public documents. Provide the link to existing goals, objectives, and measures document as a reminder for the group. (This document is available in the project library: http://www.seattle.gov/transportation/docs/seawall/Oct10/GoalsObjectives\_FINAL.pdf.)

Ridge Robinson explained that the stakeholder subgroup had previously submitted requests for a broader habitat discussion. Ridge noted that the Green/Duwamish and Central Puget Sound Watershed (WRIA 9) has identified over \$300 million dollars in salmon enhancement projects within its boundaries. Specifically, one of the recommended marine nearshore sub-watershed projects calls for restoring a migratory corridor for salmon through the downtown and central waterfront areas. Suggested improvements in that plan included improvement of shallow water habitat benches, inclusion of fish habitat features, and riparian and shallow water plantings. At some point in their life stages, salmon in this watershed do swim through the Elliott Bay Seawall Project area.

Ridge gave a brief synopsis of the existing habitat in the project area. About 60 percent of the lineal extent of the seawall has overwater coverage from piers. A video habitat survey indicated that open water areas contain more productive plant and invertebrate life, whereas dark or covered areas have limited productivity. The general characterization of the habitat quality of the entire project area is low to moderate. The existing condition of the waterfront does not support—and may inhibit—sea creatures, particularly juvenile salmon and some rockfish.

Ongoing studies with the University of Washington and the City of Seattle indicate that the addition of habitat panels (textured wall panels) on the vertical areas of the seawall are improving habitat conditions, and thus are recommended to be part of the seawall design.

Research also indicates that typical fish behavior is altered due to the dark conditions under piers along the waterfront, causing problems for juvenile salmon. Discussions with the Seawall Stakeholder Subgroup also brought up questions about the potential benefits of providing light under piers. Ridge noted that lighting may now be a regulatory requirement, as the Department of Natural Resources requires any new or refurbished structure along the waterfront within their jurisdiction to transmit 30 percent of ambient light through to the water. Light treatments that could achieve this standard may include glass blocks, grating, open portals, prisms, reflective paint or materials, solar tubes or skylights, light-penetrating cement, and artificial lights. Data is still being collected to identify options that provide the greatest positive impact for habitat, have the least impact to the public realm, and are best for all uses on the waterfront.

**Question:** If the overwater structures are on private property, will those property owners be required to make these updates?

**Response:** These treatments, if selected, would be made in the cantilevered portions of the sidewalk, rather than on private property.

**Question:** Will the team's scientific studies be distributed to the stakeholder group? **Response:** Yes, we can provide links to those documents on the project website.

✓ Action: Provide links or attachments to environmental and scientific documents on the project website.

**Question:** Will the habitat videos be posted online?

**Response:** Portions of the habitat videos are currently posted online in the *Virtual Open House* section of the website (<a href="http://seattle.gov/transportation/seawall\_open\_house.htm">http://seattle.gov/transportation/seawall\_open\_house.htm</a>).

Bob Chandler reviewed the City of Seattle's current thinking and research related to sea level rise. He reminded stakeholders that the city is currently tracking the issue of sea level rise very closely—and not just for the seawall project. Bob noted that there is no universally agreed-upon projection for sea level rise. The University of Washington is a leader this effort, specifically studying how climate change will affect the northwest. Four main drivers guide their research:

- Sea water's reaction to a warming atmosphere,
- The effect of melting ice caps,
- How local winds affect sea level, and
- How movement of tectonic plates affect sea level (particularly, in this case, the Juan de Fuca plate).

Bob Fernandes then explained the existing structural wall types that form the seawall today. He explained that the technical team is studying these structures to develop a base understanding of constructability of the new seawall.

At the southern end of the project, in the Pioneer Square and Ferry Terminal Zones, the seawall is a "gravity wall," which is a block of unreinforced concrete on top of timber piling. The construction considerations for this type of wall include the possibility of building the new wall behind the old structure and then removing the old structure.

The Central Pier Zone of the seawall was originally built in 1916, and some sections were reconstructed in 1987. Much of this is called "Type B" seawall, which is the widest seawall structure on the waterfront, used in sections of deeper water. The main structural component consists of roughly 20,000 timber piles. This structure is beneath13 feet of compacted fill. The face of the wall is a concrete panel with a steel bulkhead. For the simplest construction, it would make sense to avoid removing this mass of buried structure; rather, it could be encapsulated with construction in front and the addition of a new seawall face.

From the Aquarium northward, the "Type A" seawall is present, which is narrower than "Type B." The team currently believes that the best way to construct a new seawall in this location would be to build the new structure behind the old one, and then remove the old structure, similar to the process with the gravity wall.

Construction techniques for the new wall and structure also vary. Drilled shafts would be roughly 8 feet wide and go down to till; the shafts would be filled with concrete and steel. This technique would literally cut through the existing timbers. An alternative technique is soil improvement, which would require the contractor to dig down to the relieving platform, work around the pilings to improve and encapsulate the old piles, and effectively create a concrete dam. Neither structure would be visible from the surface, but either type is flexible enough to accommodate all desired designs. All construction techniques would include a new seawall face when complete.

There are many options for the final look of the seawall face, including textured walls, steps, beaches, and more. One of the only restrictions is maintaining a limited distance between the seawall face and the wall structure to avoid leaving liquefiable soil in between these elements.

**Question:** For what severity of earthquake will the wall be designed? **Response:** It will be designed for a 1,000 year return period, which is the estimated interval of time between earthquake events of a particular intensity.

**Question:** How disruptive will construction be to businesses, transportation, and utilities? **Response:** A rigorous process is underway to determine how staging and equipment will fit in the area. That work is not yet complete but will be included in the environmental document. The same amount of space is needed for construction, regardless of the wall alternatives. Alignment may affect construction, however, since a wall that is pulled back leaves less space in which to work. Construction zones could extend across Alaskan Way.

**Question:** Is the new face of the seawall considered new overwater coverage? **Response:** Potentially. Any new overwater coverage must go through a permitting process before it is approved.

**Question:** Which cities has the team studied to learn best practices for seawall designs? **Response:** Seattle is unique, but we have considered a number of other cities' techniques. That information can be found in the Peer Cities document, which is available on the project website (http://www.seattle.gov/transportation/docs/seawall/Peer%20City%20Case%20Studies.pdf).

**Question:** How far down, beyond the liquefiable soil, do the drilled shafts extend? **Response:** Drilled shafts would be in the range of 80 feet deep for the majority of the project area, although they would be slightly shallower in the north end.

**Question:** Washington State Ferries (WSF) plans to preserve the ferry terminal at Colman Dock. Given the close proximity of the Elliott Bay Seawall and the Alaskan Way Viaduct (AWV) Projects, how is WSF's project going to be affected?

**Response:** Lisa Parriott, WSF's previous stakeholder representative, submitted a list of key dates for that project to aid the work of both the Elliott Bay Seawall and AWV Project teams.

## SEAWALL ALTERNATIVES DEVELOPMENT AND PROCESS

Stephanie Brown explained that the team is currently in the process of establishing a range of alternatives for analysis in the Environmental Impact Statement (EIS). The purpose of this range is to develop "bookends" in terms of impacts from the seawall project and construction. The formal process for the Feasibility Study with the Corps is not complete, but the team continues to work collaboratively with the Corps as well as the Waterfront Seattle team.

Drew Gangnes explained the coordination effort between the Elliott Bay Seawall Project, Waterfront Seattle, the Corps, and the public to establish a range of alternatives for the environmental document. The federal government may provide funding for a federally preferred plan. This plan preference does not limit the project team's options but may influence the amount of funding received. Linda Smith, U.S. Army Corps of Engineers, noted that although the project may receive federal funding, the Corps is still in the process of working with the city to determine if there is a federal interest in providing funds. The Corps may not determine for some time whether or not federal money will be included in the project.

Drew also emphasized the coordination with the Waterfront Seattle team and James Corner's office in New York. The seawall locations that will be evaluated in the environmental process are being developed to offer flexibility for an optimized upland area for the future waterfront.

Stephanie reviewed themes that have been heard through public outreach and engagement. She noted that, generally, the project team has found that those who are likely to be most affected by the project are aware of it. Key themes that have emerged to date include:

- Seize habitat improvement opportunities by using innovative and science-based enhancements.
- Maintain a responsible project budget.
- Create more physical access to water and public gathering space.
- Maintain transportation routes, including continuous non-motorized pathways.
- Consider construction impacts to businesses and tourism.
- Preserve historical and cultural significance.

Drew introduced the potential wall alignment alternatives. He noted that there are two alternatives: Alternative A (also sometimes called "wall in place") and Alternative B. Compared to the existing seawall placement, each alternative expresses a different wall alignment depending on the zone. Drew emphasized that in most locations, stakeholders will note that "wall in place" is not exactly in the same location as today due to the existing wall structure.

#### Zone 1

In Zone 1, Alternative A keeps the wall exactly in place to potentially allow the proposed bored tunnel maximum space, which would require a more complex construction sequence. However, Alternative B would pull the wall inland; a structure would be set 14 to 15 feet behind the existing structure, which would allow for extraction of the existing structure. Drew noted that the potential inland location of the seawall structure does not necessarily imply that the seawall face would be pulled inland. Bob Chandler noted that the sidewalk is currently cantilevered in this area, and the seawall structure is inland of the face of the wall.

**Question:** What is the shortest distance between the bored tunnel and the seawall? Are you working together?

**Response:** Currently, the closest anticipated point from the tunnel is less than 20 feet from the seawall. However, both the tunnel and seawall measurements are dynamic at this time based upon the phase of design, and the project teams are consulting with one another.

### Zone 2

In Zone 2 (as in Zone 1 Alternative B), keeping the "wall in place" and constructing the wall in a straightforward and affordable way means that the new seawall structure would be set 14 to 15 feet behind the existing structure, allowing extraction of the current seawall. Both Alternative A and Alternative B are in the same location in Zone 2.

### Zone 3

In Zone 3, Alternative A constructs the "wall in place," which would require drilling shafts approximately three feet west (in water) of the existing seawall face to entomb the existing structure. Alternative B would place the new structure as much as 30 feet east (inland) of the existing seawall face, which would allow the team to build the new structure safely behind the soil anchors of the existing structure and then remove the old structure.

**Question:** How is the soil improvement method achieved? How will it help in an earthquake? **Response:** Soil improvement is essentially a massive injection of concrete below the relieving platform. It is a 15- to 20-foot thick "plug" that is not visible from the surface. It encapsulates everything underground and is put under pressure. In an earthquake, the plug will keep any soil from sliding out into Elliott Bay. However, everything underneath the plug remains liquefiable.

#### **Zones 4, 5, and 6**

Alternative A in Zones 4, 5, and 6 involves getting behind the existing Type A seawall heel, so that the pre-cast structure can be removed. At the Aquarium and northward, this means constructing a "wall in place" structure nine feet behind the existing seawall. In Zones 5 and 6, Alternative B is the same as Alternative A.

Zone 4 has been compelling because of a confluence of factors, including the large amount of public space and the movement of the viaduct away from the shoreline. Therefore, Alternative B could offer additional possibilities in this zone. In Alternative B, the team is considering a seawall alignment that begins at 30 feet inland in the south portion of the zone, moves inland as far as much as 70 feet in the middle of the zone, and then tapers down to 9 feet inland in the northern part of the zone. This is an area that has a great deal of flexibility and variability to support ongoing coordination with the Waterfront Seattle team. The intent is to ensure that the vision articulated by james corner field operations in the Framework Plan could be achieved with any potential seawall placement.

**Question:** Is the team avoiding in-water construction?

**Response:** Yes, as much as possible. The team must consider fish windows, expense, and other considerations with in-water construction.

**Question:** Which contaminants are in the sediment, and what is the plan to remove them? **Response:** The team has not yet included costs for extracting or treating contaminants.

**Question:** How does cost factor into the EIS alternatives?

**Response:** Once the alternatives have been established, the team will conduct a cost analysis and solidify the scope of the project. This should happen sometime prior to this summer.

**Question:** How will costs be estimated for an alternative that is neither Alternative A nor B, but somewhere in the middle? What if that option turns out to be the most expensive? **Response:** The project team will have to continue to think about contingencies for those situations.

Ridge Robinson explained that regardless of alignment, the team will provide habitat enhancements; coordination with the Corps will identify those enhancements. These features will help provide a continuous, shallow, intertidal migratory corridor along the seawall. The technical team is currently looking at the effectiveness of these enhancements and will then consider cost estimates of various habitat features. The goal is to identify the combination of features that results in the greatest return on investment, especially considering life-cycle costs over a 50-year period of analysis.

Stephanie Brown reviewed upcoming Elliott Bay Seawall Project activities, including additional stakeholder meetings and briefings to the Design and Planning Commissions, the Central Waterfront Committee and Subcommittees, and City Council.

Bob Chandler explained Elliott Bay Seawall Project coordination with the proposed bored tunnel and removal of the Alaskan Way Viaduct. The proposed bored tunnel will open at the end 2015 or the beginning of 2016, after which the viaduct will be demolished. At that point, construction of Waterfront Seattle projects—such as the public spaces and new surface Alaskan Way—can begin. However, the seawall must be in place before construction of the public spaces and streets begins. The seawall construction is expected to begin in 2013 and will be completed before the viaduct is demolished. The schedule is set this way to quickly address the public safety risk and to avoid delays to Waterfront Seattle projects.

**Question:** At what point will the project's funding be set? Are we taking into consideration when the federal government will know if they are interested in funding?

**Response:** The project team will have a reasonable idea of costs for the seawall this spring. With regard to Waterfront Seattle costs, more information is expected in 2012. One of the Central Waterfront subcommittees is specifically focused on funding, but the subcommittee is still in the information-gathering stage. The Seattle City Council and Mayor McGinn are currently looking at funding options.

### STAKEHOLDER CHECK-IN/ONCE AROUND

Bob Powers asked each stakeholder to briefly describe what additional information he or she would need to help understand the development of alternatives as the team moves forward. The stakeholders responded as follows:

**Katherine Olsen:** Requested more information about construction impacts to residences near the waterfront. Needs a clearer understanding—potentially through graphics—of how the wall can be moved into different alignments.

**Bob Donegan:** Concerned about the science behind light treatments and their effectiveness on habitat in shallow water environments. Would also like to know more about cost and construction techniques, timing, and impacts.

Lisa Quinn: Requested clearer drawings. Ensure transparency of process.

**Chuck Ayers:** Concerned about the coordination and efficiency of all three projects. Suggested, for instance, that dirt hauled away from the bored tunnel construction should be reused during seawall construction.

**Dale Sperling:** Concerned about the duration of construction, the effect on waterfront tourism, and the mitigation thereof.

**Ann Guise:** Concerned about traffic impacts and impacts to commercial activities on the waterfront, such as train and cruise ship impacts.

**Charles Knutson:** Requested a matrix of tradeoffs between the different alternatives as a means to make more value-based judgments. Requested clarification about the situation in Zone 1 with regard to accommodation of the bored tunnel.

**Brian Steinburg:** Requested clarification about demolition techniques as well as a basic explanation of construction sequencing.

**Brian Kenny:** Requested clearer visuals of construction options and the area affected by construction. Requests that the team continue to keep the seawall design flexible enough to accommodate Waterfront Seattle designs.

**Kojo Fordjour:** Would like to know more about how the team plans to enhance the habitat in an industrialized, traffic-heavy area. Concerned about the true cost of creating and maintaining such habitat enhancements.

**Geri Poor:** Echoed general concerns about construction and transportation impacts. Also concerned about in-water impacts to navigation as well as plans for the waterfront north of Pine Street.

**Geoff Anderson:** Interested in how the seawall design will accommodate the Waterfront Seattle design and schedule.

**John Odland:** Concerned about coordination between SDOT project managers. With many transportation projects occurring simultaneously, such as Airport Way S., Spokane Street Viaduct, East Marginal Way, the bored tunnel, and East and West Mercer Streets, there is concern that no one is planning for oversized freight during simultaneous construction.

**Response:** The project managers are considering the aggregated impacts to freight. This coordination is a challenge, but it is being considered.

**Warren Aakervik:** Requested more information about transportation impacts to the North Portal. Concerned about congestion.

**Vince O'Halloran:** Concerned about control of pedestrians and their safety.

**Vlad Oustimovitch:** Concerned about the strategic design to build a new seawall inland of the existing seawall, with regard to environmental and habitat quality and cost effectiveness.

**Theresa Schneider:** Concerned about the efficiency of traffic flow underneath the viaduct as well as business and tourism impacts during construction.

**Tom Tanner:** Concerned about the aggressive schedule to begin construction by 2013 as well as finding public support for funding. Curious about the strategy for approaching that topic.

## **PUBLIC COMMENT**

Bob Powers welcomed comments from members of the public; there were none.

# **NEXT STEPS AND ACTION ITEMS**

- ✓ Inform stakeholders when they can provide input to Waterfront Seattle's summer event.
- ✓ Stakeholders should provide any additional input to Meeting #1 Summary to seawall@seattle.gov within one week.
- ✓ Project team will distribute links to existing habitat studies to stakeholders via email, including habitat videos.
- ✓ Project team will distribute the Goals/Objectives/Metrics document to the stakeholders.
- ✓ Project team will discuss construction staging and its area of influence at a future meeting.

# **NEXT MEETING**

March 22, 2011, 5:15 – 7:15 p.m., Seattle Labor Temple (2800 First Avenue)